



Réalt  
na Mara  
SHELLFISH

MIIN Member:  
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# OUR STORY

- 4TH GENERATION FISHERMEN IN CROMANE.
- FAMILY RUN BUSINESS.
- SUPPLYING FRESH PURIFIED IRISH MUSSELS AND OYSTERS.
- SELLING BOTH AT HOME AND ABROAD.
- OUR SHELLFISH IS GROWN LOCALLY IN THE CLEAR WATERS OF CASTLEMAINE HARBOUR.



# WHO WE ARE



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Cromane Mussel Station on the 8th of November 1967.

# LOCATION





○ WILD ATLANTIC

○ RIVER MAINE

○ RIVER LAUNE

○ RIVER CARAGH

# OUR SHELLFISH



# CROMANE MUSSEL

- *Mytilus edulis* – BOTTOM MUSSEL.
- LARGEST NATURAL MUSSEL BED IN IRELAND.
- MUSSEL CULTIVATION – TRADITIONAL ACTIVITY.
- WILD MUSSEL SEED – TRANSPLANTED TO NURSARY GROUND.
- HARVESTED 2 YEARS LATER BY HAND DREDGE.





CROMA



# CROMANE



- *Crassos*
- GROWN
- BEST PO
- NATURA
- HUSBAN
- REMOV
- DESIRED

# CROMANE OYSTERS

- “MERROIR”
- EACH OYSTER IS INTIMATLEY IMPACTED BY:
  - ❖ THE BODY OF WATER IT COMES FROM
  - ❖ WHAT IT FEEDS ON
  - ❖ STRENGTH OF CURRENT AND TIDES
  - ❖ MINERAL CONTENT OF THE SEAFLOOR
  - ❖ RAINFALL
  - ❖ TEMPERATURE
  - ❖ SEASON & MORE



# PURIFICATION FACILITY



(APPROVAL NUMBER: IE KY 0036 EC)

- FULLY APPROVED IN ACCORDANCE WITH REGULATION (EC) 882/2004.
- SEA FISHERIES PROTECTION AGENCY (SFPA).
- FOOD SAFETY AUTHORITY OF IRELAND (FSAI).

# PURIFICATION FACILITY

- SHELLFISH HARVESTED.
- BROUGHT TO PURIFICATION FACILITY.
- SHELLFISH GRADED AND PRE-WASHED.
- DEPURATION = SHELLFISH FILTER UV TREATED SEAWATER.
- OYSTERS - 42 HOURS.
- MUSSELS - 36 HOURS.
- DISSOLVED O<sub>2</sub>, TEMP & SALINITY.
- MAXIMISE THE NATURAL FILTERING ACTIVITY.
- = EXPLULSION OF ANY DANGEROUS BIO-TOXINS.



# HEALTH BENEFITS

○ RICH IN PROTEINS

○ COPPER

○ LOW CALORIE

○ VITAMIN D

○ PHOSPHORUS

○ VITAMIN C

○ ZINC

○ MAGNESIUM

○ POTASSIUM

VITAMIN B2

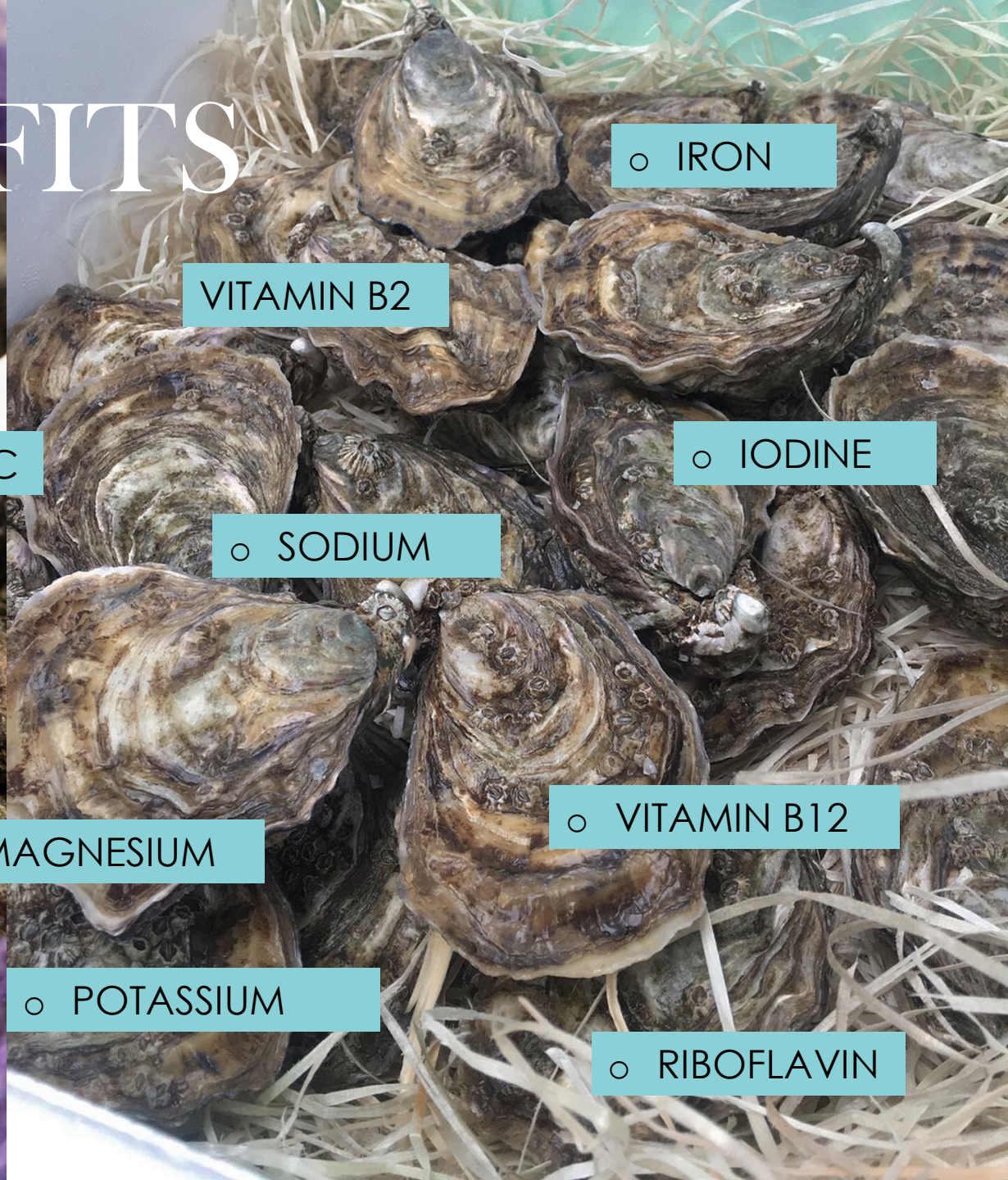
○ SODIUM

○ VITAMIN B12

○ RIBOFLAVIN

○ IRON

○ IODINE



# SUSTAINABILITY

- INCREASED CONSUMER DEMAND FOR HEALTHY, SUSTAINABLY SOURCED PROTEINS.
- SUSTAINABLE CHOICE.
- LOW IMPACT ON THE ENVIRONMENT.
- PRODUCTION REQUIRES CLEAN WATER.
- DIET COMPOSED OF NATURAL PHYTOPLANKTON.
- PRODUCTION = LOW CARBON FOOTPRINT.



# CARBON SEQUESTRATION

- IRISH AQUACULTURE SECTOR IS A LOW GHG EMISSION SECTOR.
- AQUACULTURE SECTOR ABSORBS MORE CARBON THAN IT EMITS (IE: ACT AS A CARBON SINK).
- MOLLUSCS (E.G., MUSSELS & OYSTERS) ARE AMONGST THE LOWEST EMITTERS OF GHGs.
- HIGH CARBON SEQUESTRATION CAPACITY.
- FILTER FEEDING ACTIVITIES REMOVE ORGANIC CARBON FROM SEAWATER.
- THEY SEQUESTER THIS CARBIN AS  $\text{CaCO}_3$  IN THEIR SHELLS AND SOFT TISSUES.
- MUSSEL GROWING SECTOR – CONTRIBUTES LESS THAN 1% TOWARDS IRISH SEAFOOD GHG EMISSIONS.
- OYSTER GROWING SECTOR – CONTRIBUTES LESS THAN 1% TOWARDS IRISH SEAFOOD GHG EMISSIONS. (\*The GHG emissions for oyster production are low at 235.3 kg CO<sub>2</sub> eq./t.)

(Carbon Footprint report of the Irish Seafood Sector BIM., 2023)



# CIRCULAR ECONOMY

- CIRCULAR USE OF OYSTER SHELLS.
- RECOVERING AND TRANSFORMING SHELLFISH BIO-WASTE INTO NEW PRODUCTS:
  - IN AGRICULTURE:
    - SHELLS NEUTRALISE ACIDITY OF SOIL.
    - IMPROVES STRUCTURE OF THE SOIL.
    - PROVIDES CALCIUM.
  - IN WATER TREATMENT:
    - ACTING AS A FILTER.
    - SHELLS ALSO ENSURE A STABLE LEVEL OF pH VALUES IN THE WATER.
  - IN POULTRY FEED:
    - ADDITIONAL CALCIUM TO EGG.
    - ALSO HELPS HENS ASSIMILATE PHOSPHORUS IT NEEDS.
  - IN COSMETICS:
    - MOTHER-OF-PEARL IS HIGHLY VALUED FOR IT'S APPLICATIONS IN COSMETICS AND NAIL POLISH.
- IN GARDENING:
  - SHELLS ARE NATURAL MINERAL MULCH.
  - PREVENTS GROWTH OF WEEDS.
  - PROTECTS AGAINST FROST & HEAT.
  - LIMITS EVAPORATION BY KEEPING SOIL MOIST & COOL.
  - USED AS PLANTERS, GRAVEL & AS BORDERS.

# CIRCULAR ECONOMY

WATER  
TREATMENT

FERTILISERS

FEED

COSMETICS

BUILDING  
MATERIALS

FOOD &  
PHARMA



THANK YOU!

Any Questions?

[www.realtnamarashellfish.ie](http://www.realtnamarashellfish.ie)

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